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## NOTICE OF ALLOWANCE AND FEE(S) DUE

20277 7590 04/07/2009

MCDERMOTT WILL & EMERY LLP  
600 13TH STREET, N.W.  
WASHINGTON, DC 20005-3096

EXAMINER

RADKOWSKI, PETER

ART UNIT

PAPER NUMBER

2883

DATE MAILED: 04/07/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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I0/593,278

I0/I0/2007

Miyoko Fujimoto

049677-019I

8497

TITLE OF INVENTION: OPTICAL FIBER FOR IRRADIATION-LIGHT TRANSFER AND LIGHT IRRADIATION DEVICE EQUIPPED WITH THE SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	07/07/2009

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
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Alexandria, Virginia 22313-1450  
or Fax (571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

20277 7590 04/07/2009

**MCDERMOTT WILL & EMERY LLP**  
600 13TH STREET, N.W.  
WASHINGTON, DC 20005-3096

**Note:** A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,278 10/10/2007 Miyoko Fujimoto 049677-0191 8497

**TITLE OF INVENTION:** OPTICAL FIBER FOR IRRADIATION-LIGHT TRANSFER AND LIGHT IRRADIATION DEVICE EQUIPPED WITH THE SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional NO \$1510 \$300 \$0 \$1810 07/07/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
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RADKOWSKI, PETER 2883 385-032000

**1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).**

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

**2. For printing on the patent front page, list**

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

**3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)**

**PLEASE NOTE:** Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

**4a. The following fee(s) are submitted:**

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

**4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)**

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

**5. Change in Entity Status (from status indicated above)**

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

**NOTE:** The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,278	10/10/2007	Miyoko Fujimoto	049677-0191	8497
20277	7590	04/07/2009	EXAMINER	
MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			RADKOWSKI, PETER	
			ART UNIT	PAPER NUMBER
			2883	
DATE MAILED: 04/07/2009				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability**

Application No.

10/593,278

Examiner

PETER RADKOWSKI

Applicant(s)

FUJIMOTO ET AL.

Art Unit

2883

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/31/2008.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

***Detailed Office Action***

***Comments***

1. Dependent claims 16, 17, 18 and 19 were added by the applicant.

***Response to Applicant's Arguments***

2. As applicant argues, prior art reference van Woesik (5,408,551; "van Woesik") fails to teach an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, having a fixing member for fixing and bundling at least two portions of the same optical fiber at a crossing zone of the partial annular portion. Applicant's Arguments, p. 7, ll. 20-21. This argument is persuasive in light of applicant's amendments to independent claim 1 wherein applicant adds the limitation of "a fixing member for fixing and bundling at least two portions of the optical fiber at a crossing zone of the two portions." This limitation allows the fixing member to adjust a radius of an annular shaped fiber.

van Woesik remains the closest prior art of record in this application. However, in light of the applicant's amendment, claims 1, 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowable as distinguished over the prior art of record because of the reason stated above. It is this examiner's position that prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious the limitations of the claims discussed above.

3. As applicant argues, prior art reference van Woesik (5,408,551; "van Woesik") fails to teach an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation

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light incident from an incidence terminal thereof, having a fixing member for fixing and bundling at least two portions of the same optical fiber at a crossing zone of the partial annular portion. Applicant's Arguments, p. 7, ll. 20-21. This argument is persuasive in light of applicant's amendments to independent claim 2 wherein applicant adds the limitation of "a fixing member for fixing and bundling at least two portions of the optical fiber at a crossing zone of the two portions." This limitation allows the fixing member to adjust a radius of an annular shaped fiber.

van Woesik remains the closest prior art of record in this application. However, in light of the applicant's amendment, claims 2, 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowable as distinguished over the prior art of record because of the reason stated above. It is this examiner's position that prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious the limitations of the claims discussed above.

4. As applicant argues, prior art reference van Woesik (5,408,551; "van Woesik") fails to teach an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, having a plurality of partial annular portions being fixed on a member. Applicant's Arguments, p. 8, ll. 7-9. This argument is persuasive in light of applicant's amendment to independent claim 3 wherein applicant adds the limitation of "intermediate regions of the optical fiber in an arc shape" and the "plurality of annular portions are fixed on a member." This limitation allows the fixing member to adjust a radius of an annular shaped fiber.

van Woesik remains the closest prior art of record in this application. However, in light of the applicant's amendment, claims 3, 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowable as

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distinguished over the prior art of record because of the reason stated above. It is this examiner's position that prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious the limitations of the claims discussed above.

5. As applicant argues, prior art reference van Woesik (5,408,551; "van Woesik") fails to teach an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, having an intermediate region of the optical fiber formed in a spiral shape around a bar. Applicant's Arguments, p. 8, ll. 11-15. This argument is persuasive in light of applicant's amendment to independent claim 4 wherein applicant adds the limitation of "the optical fiber being formed in a spiral shape around a bar." This limitation allows the fixing member to adjust a radius of an annular shaped fiber.

van Woesik remains the closest prior art of record in this application. However, in light of the applicant's amendment, claims 4, 5, 9, 15, 17, 18 and 19 are allowable as distinguished over the prior art of record because of the reason stated above. It is this examiner's position that prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious the limitations of the claims discussed above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Reasons for Allowance."

***Allowable Subject Matter***

6. Claims 1, 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowed.

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Independent claim 1 is allowed because the prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, comprising: a fixing member for fixing and bundling at least two portions of the optical fiber at a crossing zone of the two portions; in combination with the other recited limitations in the claim. Claims 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowable as dependent upon claim 1.

7. Claims 2, 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowed.

Independent claim 2 is allowed because the prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, comprising: a fixing member for fixing and bundling at least two portions of the optical fiber at a crossing zone of the two portions; in combination with the other recited limitations in the claim. Claims 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowable as dependent upon claim 2.

8. Claims 3, 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowed.

Independent claim 3 is allowed because the prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, comprising: intermediate regions of the optical fiber in an arc shape, the plurality of annular portions are fixed on a member; in combination with the other recited limitations in the claim.

Claims 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowable as dependent upon claim 3.

9. Claims 4, 5, 9, 15, 17, 18 and 19 are allowed.



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Independent claim 4 is allowed because the prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, comprising: an intermediate region of the optical fiber being formed in a spiral shape around a bar; in combination with the other recited limitations in the claim. Claims 5, 9, 15, 17, 18 and 19 are allowable as dependent upon claim 4.

### ***Conclusion***

10. The prior art made of record in Form 892 and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Radkowski whose telephone number is (571) 270-1613. The examiner can normally be reached on Monday - Thursday, 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font, can be reached on (517) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, See <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free). If you

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would like assistance from a USPTO Customer Service Representative or access to the automated information system, call (800) 786-9199 (IN USA OR CANADA) or (571) 272-1000.

/Peter P. Radkowski/  
Patent Examiner, Art Unit 2883

/James P. Hughes/  
Primary Examiner, Art Unit 2883

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